

### REMARKS

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

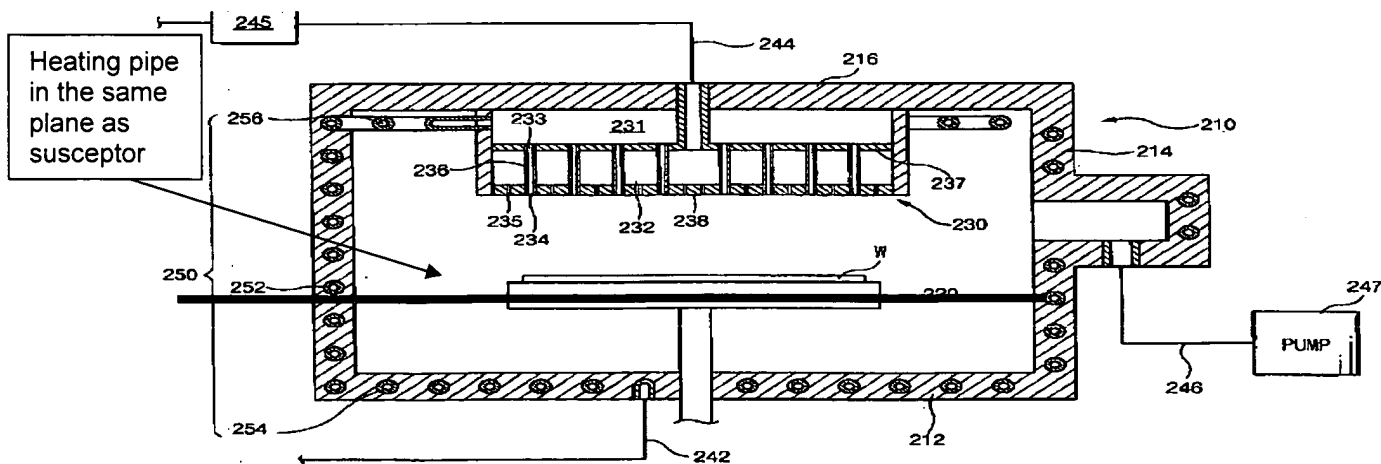
Claims 1, 3-13, 15-17 and 34-35 are pending in this application. Claim 1 is amended and no claims have been cancelled. Claims 34 and 35 are newly added. Claims 1 and 34 are the independent claims.

*Furthermore, upon review of the enclosed Amendment, Applicants respectfully request that the Examiner contact the undersigned to discuss the Applicants' reasoning and/or possible claim amendments that may place the application in condition for allowance.*

### Example Embodiments of the Present Application

Independent claims 1 and 34 recite "at least a part of the heating pipe is in the same plane as the susceptor". Example non-limiting embodiments of these features are discussed, for example, in paragraph [0010] and FIG. 2 of the instant specification.

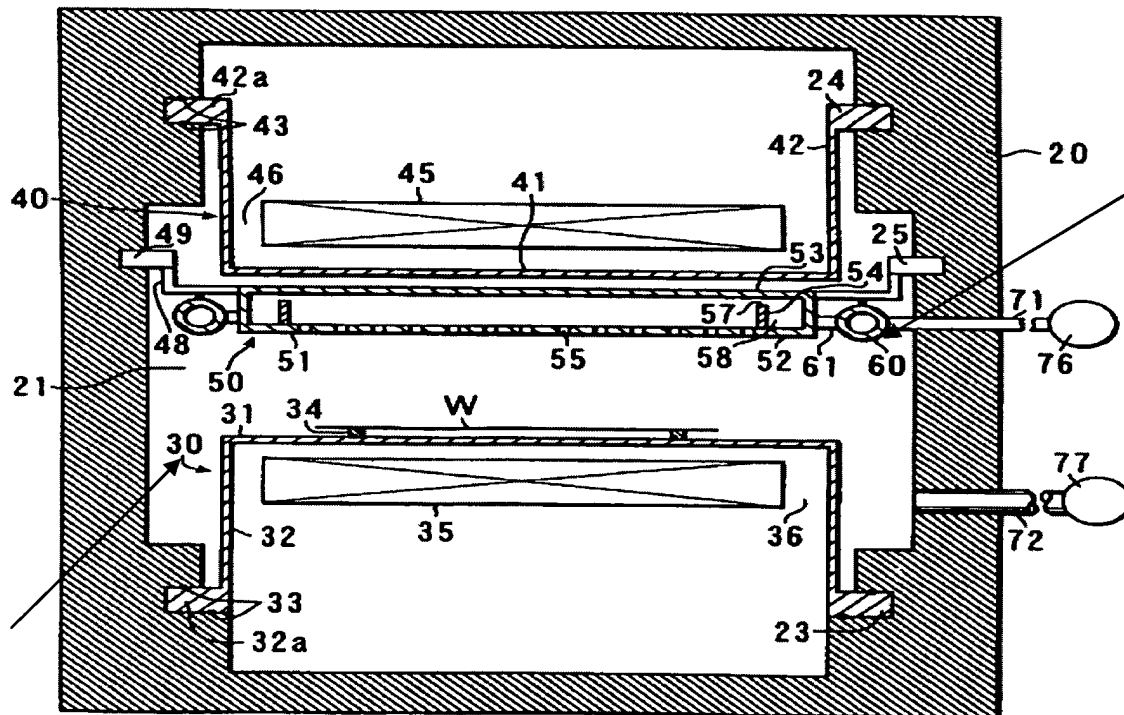
In example embodiments of the present application, for example, FIG. 2 (see below), a portion of the heating pipe 250 is in the same plane as the susceptor 220.



**Rejections under 35 U.S.C. § 102**

Claims 1 and 16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Kitamura et al. (US 6,007,633, hereinafter "Kitamura"). Applicants respectfully traverse this rejection for the reasons detailed below.

On page 6 of the Office Action, in the Response to Arguments section, the Examiner alleges that the term surrounds is broad and includes the idea of encircling and does not require that the outer tube be in the same plane as the susceptor. Even if the Examiner were correct (which we do not believe), FIG. 1 of Kitamura illustrates that the heating pipe 60 is above the susceptor 30 and no portion of the heating pipe 60 is in the same plane as the susceptor 30.



Therefore, Kitamura fails to teach or suggest an "at least a part of the heating pipe is in the same plane as the susceptor" as disclosed in independent claim 1.

The Applicants, therefore, respectfully request that the rejection to Claim 1 under 35 U.S.C. § 102(b) be withdrawn.

Claim 16, dependent on independent claim 1, is patentable for the reasons stated above with respect to claim 1 as well as for their own merits.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection to independent claim 1 and all claims dependent thereon.

**Rejections under 35 U.S.C. § 103**

**Kitamura in view of Sakamoto**

Claims 1, 3, 8, 10 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kitamura in view of Sakamoto et al. (US 5,968,593, hereinafter "Sakamoto"). Applicants respectfully traverse this rejection for the reasons detailed below.

With respect to claims 3-7 and 9-11, Applicants incorporate the discussion presented above with respect to the deficiencies of Kitamura to teach or suggest the apparatus for fabricating a semiconductor device as recited in claim 1. As claims 3-7 and 9-11 depend from claim 1, Applicants submit that 3-7 and 9-11 are equally allowable over the applied references.

With respect to the proposed combination of Kitamura and Sakamoto, Applicants respectfully submit that the combination is improper for at least the following reasons. Kitamura is directed to a single substrate-processing apparatus in a semiconductor processing system, having a process gas supply means with a simple structure suitable for the double side heating type, uniformly supplying a process gas, whereas the teachings of Sakamoto describe a semiconductor manufacturing apparatus capable of providing an improved uniform temperature distribution over the surface of a wafer and an apparatus for processing simultaneously a plurality of wafers. Accordingly, Applicants respectfully submit there is insufficient evidence in the record for modifying the apparatus of Kitamura to incorporate the gas feed pipe of Sakamoto.

Further, Applicants respectfully submit that an attempt to bring in the isolated teachings of the gas feed pipe of Sakamoto into the apparatus of Kitamura would amount to improperly picking and choosing from the different references without regard for the teachings of the references as a whole.<sup>1</sup> The Applicants maintain, therefore, that the Action does not present the required "convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references," *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985), and that this rejection may not be properly maintained absent such reasoning.

The Applicants, therefore, respectfully request that the rejection to Claim 1 under 35 U.S.C. § 103(a) be withdrawn.

Claims 3, 8, 10 and 11, dependent on independent claim 1, are patentable for the reasons stated above with respect to claim 1 as well as for their own merits.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection to independent claim 1 and all claims dependent thereon.

*Kitamura and Sakamoto in view of Shim*

Claims 4-7 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kitamura and Sakamoto as applied to claims 1, 3, 8, 10 and 11 above, and further in view of Shim et al. (US 2003/0041804 A1, hereinafter "Shim"). Applicants respectfully traverse this rejection for the reasons detailed below.

---

<sup>1</sup> See *In re Ehrreich* 590 F2d 902, 200 USPQ 504 (CCPA, 1979) (stating that patentability must be addressed "in terms of what would have been obvious to one of ordinary skill in the art at the time the invention was made in view of the sum of all the relevant teachings in the art, not in view of first one and then another of the isolated teachings in the art," and that one "must consider the entirety of the disclosure made by the references, and avoid combining them indiscriminately.")

With respect to claims 4-7 and 9, Applicants incorporate the discussion presented above with respect to the deficiencies of Kitamura to teach or suggest the apparatus for fabricating a semiconductor device as recited in claim 1. As claims 4-7 and 9 depend from claim 1, Applicants submit that 4-7 and 9 are equally allowable over the applied references.

The Applicants, therefore, respectfully request that the rejection to Claims 4-7 and 9 under 35 U.S.C. § 103(a) be withdrawn.

*Kitamura and Sakamoto in view of Shinriki*

Claims 12, 13 and 15-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kitamura and Sakamoto as applied to claims 1, 3, 8, 10 and 11 above, and further in view of Shinriki et al. (US 6,800,139 B1, hereinafter “Shinriki”). Applicants respectfully traverse this rejection for the reasons detailed below.

With respect to claims 12, 13 and 15-17, Applicants incorporate the discussion presented above with respect to the deficiencies of Kitamura to teach or suggest the apparatus for fabricating a semiconductor device as recited in claim 1. As claims 12, 13 and 15-17 depend from claim 1, Applicants submit that 12, 13 and 15-17 are equally allowable over the applied references. The Applicants, therefore, respectfully request that the rejection to Claims 12, 13 and 15-17 under 35 U.S.C. § 103(a) be withdrawn.

**New Claims**

Claims 34-35 have been added and claim 35 depends from claim 34. For the reasons stated above, the Applicants believe claim 34 to be allowable over the cited prior art. Support for claims 34-35 can be found at least in the specification as filed, for example, paragraph [0010].

**CONCLUSION**

In view of the above remarks and amendments, the Applicants respectfully submit that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to contact the undersigned.

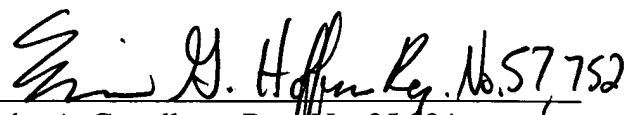
*As discussed above, Applicants respectfully request that the Examiner contact the undersigned to discuss the Applicants' reasoning and/or possible claim amendments that may place the application in condition for allowance.*

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Erin G. Hoffman, Reg. No. 57,752, at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By   
for John A. Castellano, Reg. No. 35,094  
P.O. Box 8910  
Reston, Virginia 20195  
(703) 668-8000

JAC/EGH:tlt